

STATE OF COLORADO

John W. Hickenlooper, Governor
Christopher E. Urbina, MD, MPH
Executive Director and Chief Medical Officer

Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department
of Public Health
and Environment

Carl Daly
Air Program Chief
US Environmental Protection Agency
8P-AR
1595 Wynkoop St.
Denver, CO 80202-1129

January 11, 2012

Dear Mr. Daly:

The Colorado Department of Public Health and Environment – Air Pollution Control Division (APCD) is being required to relocate Colorado's current National Core Monitoring Network (NCore) site located at the now vacated Denver Municipal Animal Shelter. A replacement NCore site has been identified at Denver Health's La Casa – Quigg Newton Family Health Center and the APCD is requesting your acceptance of the proposed site.

The existing Denver Municipal Animal Shelter (08-031-0025) site was established at 678 S. Jason St., Denver, Colorado in July 2005 and became fully operational as Colorado's NCore site in January 2011. A current list of NCore parameters operating at the site and a medium scale map of the site are given in Attachments 1 and 2, respectively. However, this site will have to be relocated due to a change in use of the adjacent former animal shelter building and land uses changes that will create an environment that will no longer be suitable for ambient air quality monitoring. A conceptual drawing from "The River South Greenway Master Plan" of the land redevelopment to occur at this site can be seen in Attachment 3. As can be seen, roads will be relocated and new trees will be planted to make this area part of a larger park system as part of Denver's "River South Greenway" project.

Based upon review of Front Range air quality monitoring and emissions inventory data in the Denver area, a new NCore site has been identified and is being proposed to Environmental Protection Agency (EPA) for acceptance. The propose site is located at Denver Health's La Casa – Quigg Newton Family Health Center, 4545 Navajo St., Denver, Colorado 80211 (coordinates 39° 46' 46.04" N, 105° 0' 18.68" W). An initial investigation of the site shows that all siting criteria can be reasonably met and initial conversations with the Denver Health's facility management are favorable. The spatial relationship

between the existing DMAS NCore site and this proposed NCore site can be seen in Attachment 4, with more detailed Google Earth views of the site in Attachments 5, 6 and 7.

During the last EPA/National Association of Clean Air Agencies (NACAA) Monitoring Steering Committee meeting, which was held in Denver on October 24th – 26th, 2011, both regional and national EPA staff had the opportunity to visit the proposed site, which resulted in favorable reviews.

Listed below is a summary of attachments for this application:

- Attachment 1: Denver Municipal Animal Shelter – Parameter List
- Attachment 2: Denver Municipal Animal Shelter NCore Site Map
- Attachment 3: The River South Greenway Master Plan – DMAS NCore Site Redevelopment
- Attachment 4: Existing and Proposed NCore Sites (Large Scale Map)
- Attachment 5: Proposed Denver Colorado NCore Site Location (Large Scale Map)
- Attachment 6: Proposed Denver Colorado NCore Site Location (Medium Scale Map)
- Attachment 7: Proposed Denver Colorado NCore Site Location (Small Scale Map)
- Attachment 8: Region 8 Network Modification Request Form

As part of this process, this letter will be made available for public comment for a 30-day period and details of the new location will be included in the 2012 Annual Network Plan. The APCD welcomes your consideration of our request and looks forward to your response. Please let me know if you have any questions.

Sincerely,



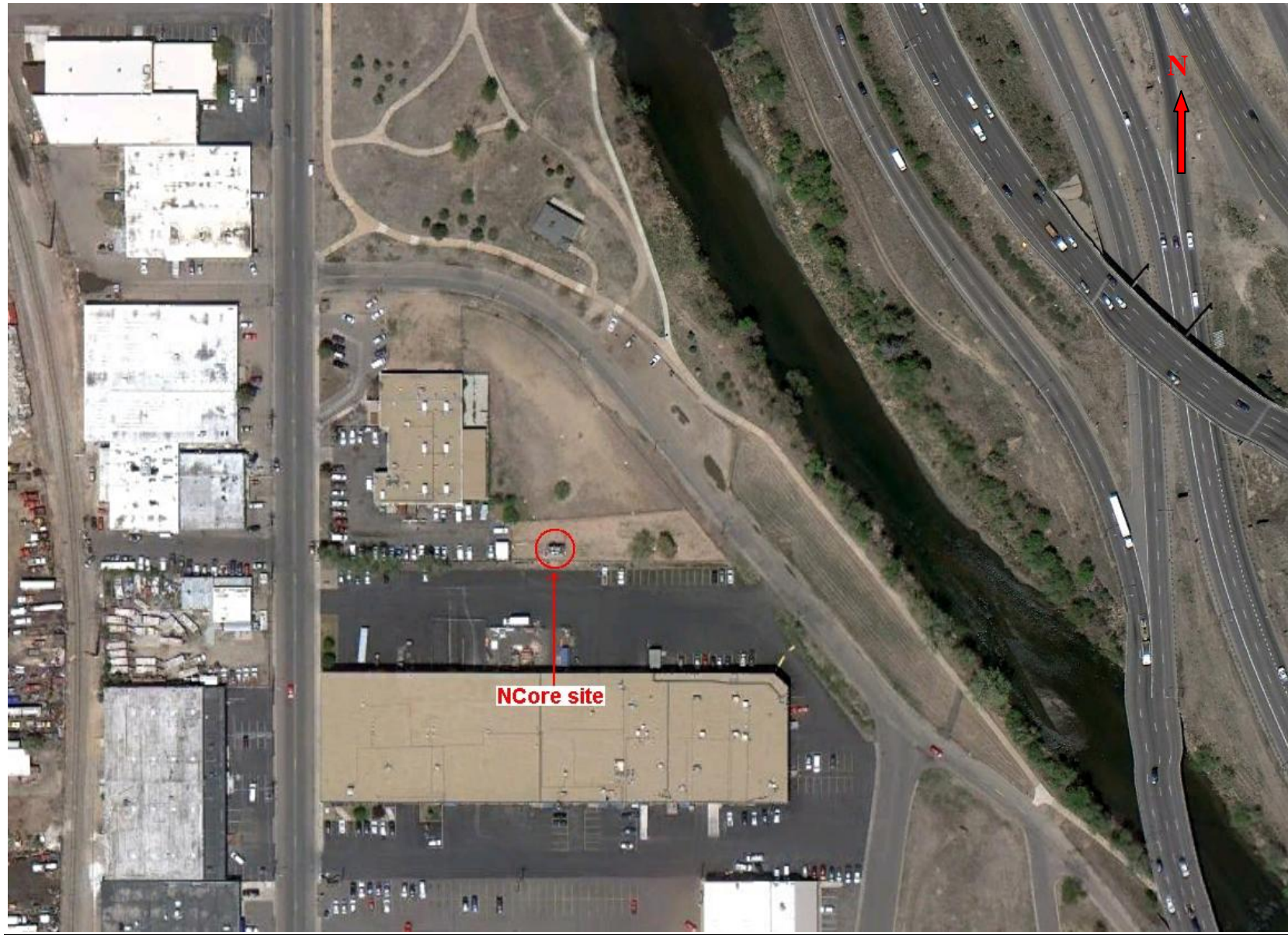
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Attachment 1 - Denver Municipal Animal Shelter (DMAS) – Parameter List

NCORE Denver Municipal Animal Shelter – Parameter List	
Gaseous Measurements	
<u>Parameter</u>	<u>Analyzer / Sampler / Sensor</u>
Carbon Monoxide (CO)	Thermo 48i-TLE
Nitric Oxide (NO)	Teledyne/API 200EU
Oxides of Nitrogen (NO _y)	Teledyne/API 200EU
Ozone (O ₃)	Teledyne/API 400E
Sulfur Dioxide (SO ₂)	Teledyne/API 100EU
Particulate Measurements	
<u>Parameter</u>	<u>Analyzer / Sampler / Sensor</u>
Lead – Total Suspended Particulates	Sierra Anderson – High Volume Sampler
Particulate Matter < 10 microns (filter)	R&P 2025 Sequential Sampler
Particulate Matter < 10 microns (continuous)	Thermo 1400 TEOM
Particulate Matter < 2.5 microns (filter)	R&P 2025 Sequential Sampler
Particulate Matter < 2.5 microns (continuous)	Thermo 1400 TEOM
Particulate Matter < 2.5 microns Chemical Speciation	MetOne SASS Sampler
Particulate Matter < 2.5 microns Carbon	URG 3000N
Meteorological Measurements	
<u>Parameter</u>	<u>Analyzer / Sampler / Sensor</u>
Wind Speed - Scalar	MetOne 010C
Wind Speed - Vector	MetOne 010C
Wind Direction - Scalar	MetOne 020C
Wind Direction - Vector	MetOne 020C
Wind Direction – Sigma Theta	(calculated)
Temperature (10 meters)	MetOne 060C
Temperature (2 meters)	MetOne 060C
Relative Humidity	Climatronics

Attachment 2 – Denver Municipal Animal Shelter NCore Site Map



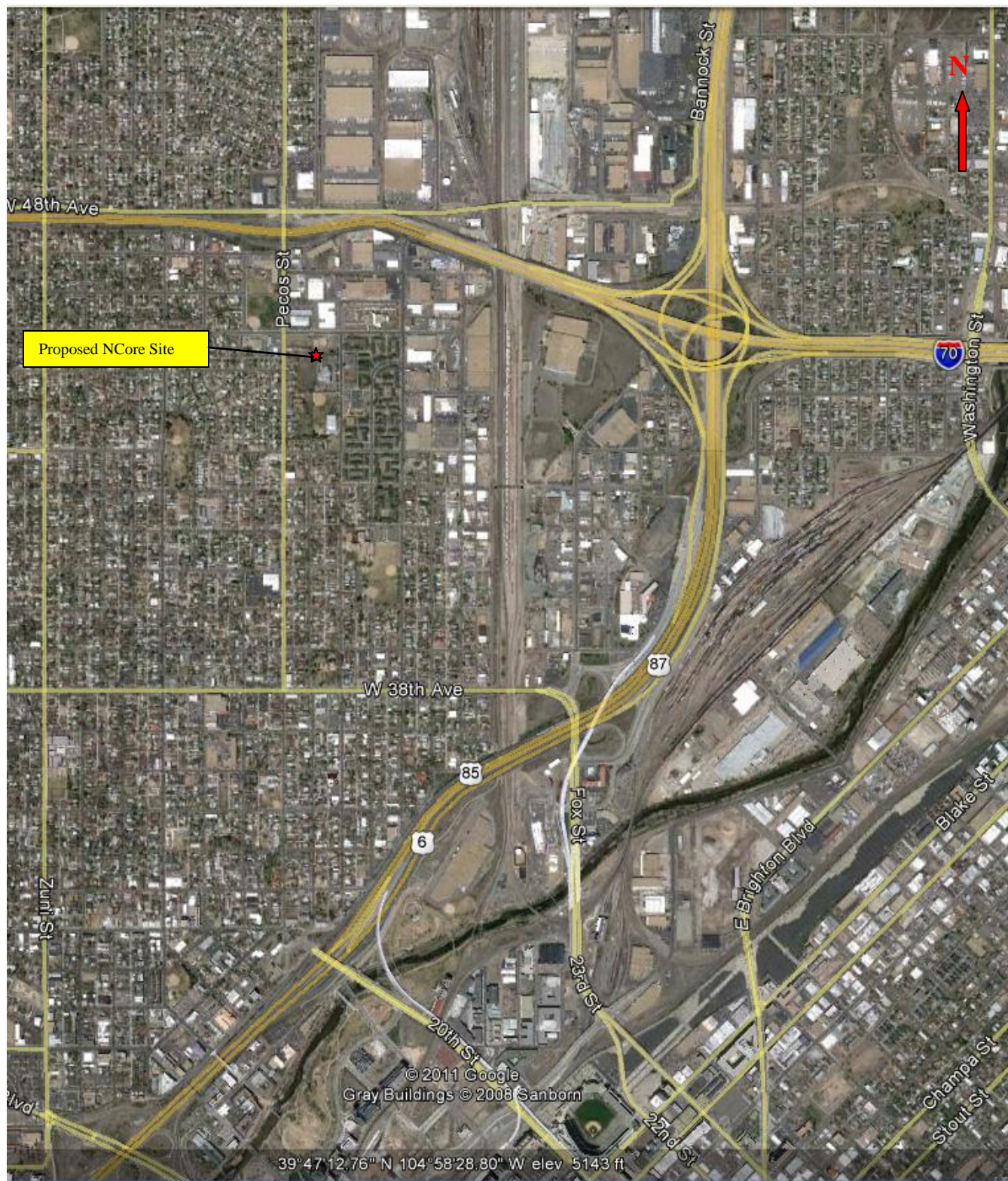
Attachment 3 – The River South Greenway Master Plan – DMAS NCore Site Redevelopment



Attachment 4 - Existing and Proposed NCore Sites (Large Scale Map)



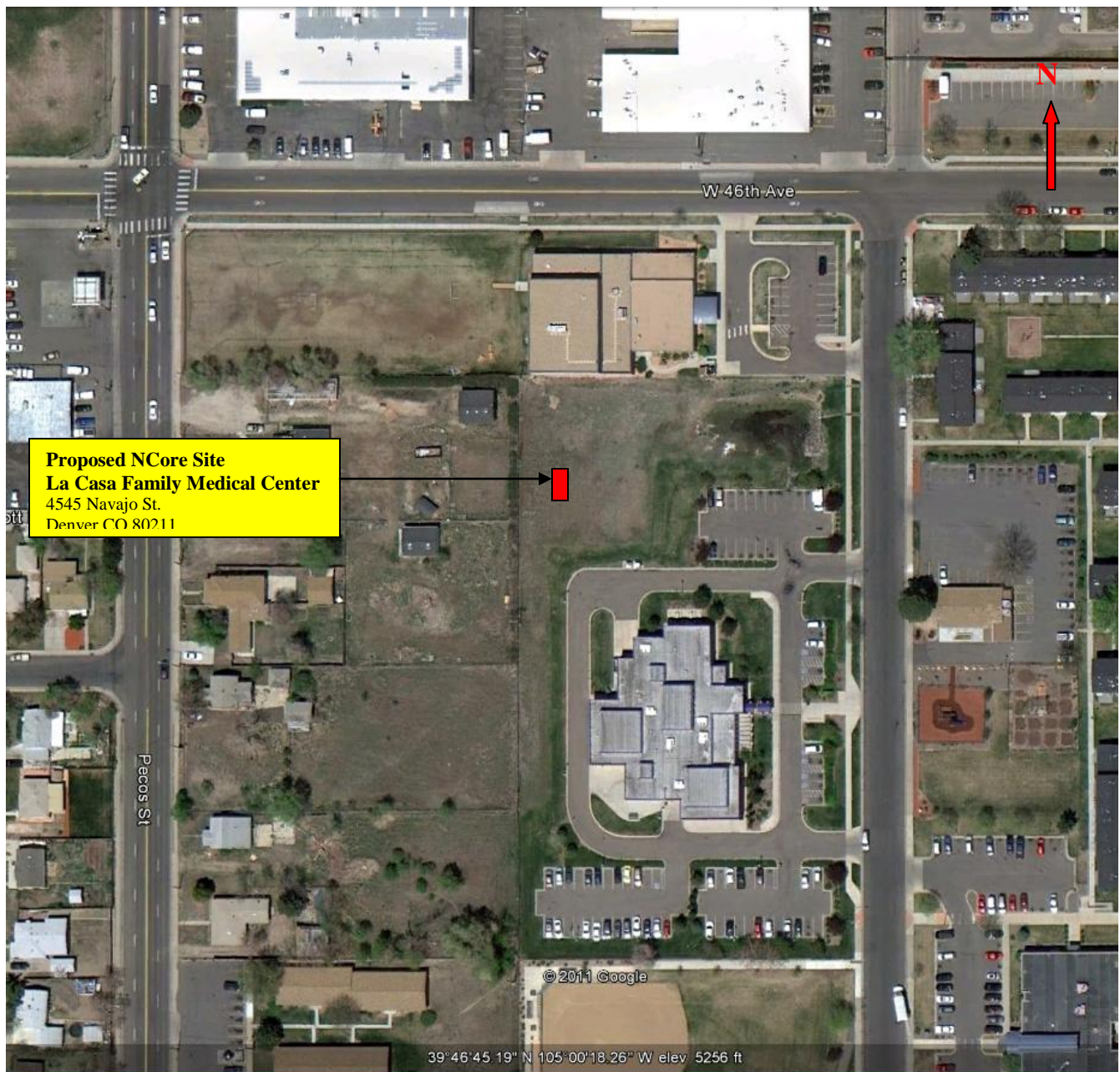
Attachment 5 – Proposed Denver Colorado NCore Site Location (Large Scale)



Attachment 6 – Proposed Denver Colorado NCore Site Location (Medium Scale)



Attachment 7 – Proposed Denver Colorado NCore Site Location (Small Scale)




Attachment 8 – Proposed Denver Colorado NCore Site Network Modification Request Form

EPA REGION 8 AMBIENT AIR MONITORING NETWORK MODIFICATION REQUEST FORM (VERSION 2, 4/1/04)						
DATE: 1/10/12		CITY: Denver			STATE: Colorado	
AQS SITE ID: 08-031-????			SITE NAME: LaCasa			
PROPOSED MODIFICATION/REASON WHY: The Colorado Department of Public Health and Environment (CDPHE) - Air Pollution Control Division (APCD) is proposing to relocate the Denver Municipal Animal Shelter NCore site (08-031-0025) to Denver Health's La Casa – Quigg Newton Family Health Center, 4545 Navajo St., Denver, Colorado 80211 (coordinates 39° 46' 46.04" N, 105° 0' 18.68" W). This relocation is being requested due to a change in use of the adjacent former animal shelter building and land uses changes at the Denver Municipal Animal Shelter site that will create an environment that will no longer be suitable for ambient air quality monitoring. See attached letter.						
AIR QUALITY PARAMETER (PM10, SO2, CO, NO2, ETC.)	MONITOR TYPE (SLAMS, SPM, TRIBAL, etc.)	CHECK ONE OR MORE OF THE APPLICABLE CATEGORIES BELOW:				LIST SAMPLER EQUIPMENT
		MAX CONC	SOURCE IMPACT	POPULATION EXPOSURE	BACKGROUND	
CO (trace)	NCore			X		Thermo 48i-TLE
NO/NOy	NCore			X		T-API 200EU
O3	NCore			X		T-API 400E
SO2 (trace)	NCore			X		T-API 100EU
PM10	NCore			X		R&P 2025 & Thermo 1400 TEOM
PM2.5	NCore			X		R&P 2025 & Thermo 1400 TEOM
PM2.5 Speciation	NCore			X		MetOne SASS & URG 3000N Carbon
Pb	NCore			X		R&P low-vol PM10
PROPOSED SAMPLING START / REMOVAL DATE OR DATE STARTED / REMOVED: Proposed start 5/1/2012						
ESTIMATED MEASUREMENTS FOR AIR QUALITY PARAMETERS:						
LOCATION (LAT./LONG. OR UTM'S): 39° 46' 46.04" N, 105° 0' 18.68" W						
SITE ELEVATION (M. MSL): 1602				PROBE HEIGHT (M. AGL): 3		
DISTANCE TO TREE DRIPLINE (M)	DIRECTION TO TREE	DISTANCE TO OBSTACLE (M)	DIRECTION TO OBSTACLE	OBSTACLE HEIGHT ABOVE PROBE (M)	OBSTACLE COMMENTS	
UNRESTRICTED AIR FLOW: >270 DEG. >180 DEG. <CRITERIA _____ DEG.						
DISTANCE TO FLUES/INCINERATORS (M): none						
DISTANCE TO INTERSECTIONS (M): 100			DISTANCE FROM SUPPORTING STRUCTURES (M): VERT. __1__ HORIZ. __1__			
DISTANCE TO EDGE OF NEAREST ROADWAY	NAME OF ROADWAY	DIRECTION	DAILY TRAFFIC ESTIMATES	YEAR OF TRAFFIC ESTIMATES	TYPE OF ROADWAY	COMMENTS
110	W. 46 th Ave.	NORTH	5375	2005	Local	

82	Navajo St.	EAST	1415	2008	Local	
320	W. 44 th St.	SOUTH	1540	2005	Local	
100	Pecos St.	WEST	17900	2003	Local	
DISTANCE TO NEAREST POINT SOURCES (MILES)		DIRECTION TO POINT SOURCES	DISTANCE TO NEAREST AREA SOURCES (MILES)		DIRECTION TO AREA SOURCES	COMMENTS

CERTIFICATION: I certify the network modification proposed above meets all 40 CFR 58, Appendix E siting criteria, except as noted with submittal.

Printed Name: Gregory Harshfield Signature: 

FOR EPA USE ONLY: Received Date: _____ Follow-up Actions: _____ Approval Status
Given: _____ Email Response Date: _____ Letter Response Date: _____

<u>FOR METEOROLOGICAL PARAMETERS ONLY:</u>			
MONITORING PURPOSE/OBJECTIVES: Support/required for NCore sites.			
PROPOSED MONITORING SCHEDULE/DURATION: Continuous/hourly averages			
PROPOSED START / REMOVAL DATE OR DATE STARTED / REMOVED: Proposed start 4/1/2012			
DATA ACQUISITION SYSTEM:			
PRIMARY DRDAS Ultimate	PARAMETERS:	APPLICABLE √ those that apply	SENSOR HT (M)
BACKUP	WIND SPEED/DIRECTION	X	10
EQUIPMENT MANUFACTURER/MODEL: WS, WD, T = MetOne RH = Climatronics	SOLAR RADIATION		
	RELATIVE HUMIDITY	X	2
WILL THE DATA BE USED FOR MODELING? YES NO	PRESSURE		
IS SITE REQUIRED FOR SIP? YES NO	SIGMA THETA	X	10
UNRESTRICTED AIRFLOW? YES NO	PRECIPITATION		
DISTANCE TO TREE DRIPLINE (M):	TEMPERATURE	X	2 & 10
NEARBY TERRAIN: SMOOTH ROLLING ROUGH	OTHER (DESCRIBE)		
TOPOGRAPHIC FEATURES (E.G HILLS, MOUNTAINS, VALLEYS, RIDGES, BODIES OF WATER):			
COMMENTS:			